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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,131	11/07/2005	Hans-Jurgen Wehner	GOTZF 146 US	4967

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EXAMINER	
KIM, JOHN K	

ART UNIT	PAPER NUMBER
2834	

NOTIFICATION DATE	DELIVERY MODE
05/29/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/531,131	WEHNER ET AL.	
	Examiner	Art Unit	
	JOHN K. KIM	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 April 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-2, 4-10 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuzawa et al (US 5084642) in view of Rentschler et al (US 6599351).

As for claim 1, Katsuzawa teaches (in Figs. 1-4) a coolable housing jacket (14) for an electric motor, which is manufactured as a cast moulded part (col. 1, line 36-39),

is formed for receiving a concentric internal rotor/stator arrangement (17, col. 2, line 55-56) together with windings and winding overhang (inherent for stator winding) with a through-passage (inside circle of 17) that is symmetrical, concentric and/or coaxial with respect to a hypothetical motor axis of rotation, and which is penetrated by one or more cooling channels (15a-b) to form a coolant circuit.

Katsuzawa, however, failed to teach characterised by a coating of the jacket inner faces including the channel internal walls via a cathodic dip-varnishing process. In the same field of endeavor, Rentschler teaches (col. 3, line 23-25) a coating of the metal casting inner faces via a cathodic dip-varnishing process. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Rentschler with that of Katsuzawa for anti-corrosion.

As for claim 2, Katsuzawa and Rentschler teach the claimed invention as applied to claim 1 above. Rentschler further teaches (col. 4, line 5-6) characterised in that the coating thickness is between 10 .mu.m and 50 .mu.m (35-40 mu.m).

As for claim 4, Katsuzawa and Rentschler teach the claimed invention as applied to claim 1 above. Katsuzawa further teaches (in Figs. 1-4) characterised by the manufacture of the jacket body (10) from aluminium. (col. 2, line 42-45).

As for claim 5, Katsuzawa and Rentschler teach the claimed invention as applied to claim 1 above. Katsuzawa further teaches (in Figs. 1-4) characterised in that the cooling channels (15a-b) end with apertures (24 and col. 3, line 19-20) freely accessible

on the outside opening on to at least a first (14) of plural housing jacket end faces (14,12).

As for claim 6, Katsuzawa and Rentschler teach the claimed invention as applied to claim 5 above. Katsuzawa further teaches (in Figs. 1-4) characterised in that in a second of the housing jacket end faces (14, 12) the cooling channels (15a-b) end at a housing wall formed by casting (col. 2, line 42-45) and are thus closed in a sealing-tight manner with respect to the outside.

As for claim 7, Katsuzawa and Rentschler teach the claimed invention as applied to claim 6 above. Katsuzawa further teaches (in Figs. 1-4) characterised in that the housing jacket end faces (14, 12) comprise two end faces which are remote from one another and/or parallel to one another, the cooling channels (16a-b) in the first (14) of which end freely accessibly on the exterior, and the cooling channels (16a-b) in the second (12) of which end at a housing end wall formed by casting (col. 2, line 42-45) and are thus closed in a sealing-tight manner to the exterior.

As for claim 8, Katsuzawa and Rentschler teach the claimed invention as applied to claim 6 above. Katsuzawa further teaches (in Figs. 1-4) characterised in that the second (12) housing jacket end face or end wall formed by casting (col. 2, line 42-45) abuts the remaining housing jacket body (10) in an integral manner.

As for claim 9, Katsuzawa and Rentschler teach the claimed invention as applied to claim 7 above. Katsuzawa further teaches (in Figs. 1-4) characterised in that the second (12) housing end wall formed by casting (col. 2, line 42-45) is provided inside

with cavities such that they form deflection chambers and/or transverse ducts (18a-b), which communicate with the cooling channels (16a-b), extend transverse to a hypothetical motor axis of rotation, and join together the channel ends and/or the deflection chambers.

As for claim 10, Katsuzawa and Rentschler teach the claimed invention as applied to claim 6 above. Katsuzawa further teaches (in Figs. 1-4) characterised in that the housing jacket end face (6) formed by casting (col. 2, line 42-45) and sealing the cooling channels (15a-b) has in its cast wall one or more bores (26) or other perforations.

As for claim 13, Katsuzawa and Rentschler teach the claimed invention as applied to claim 10 above. Katsuzawa further teaches (in Figs. 1-4) characterised in that the bores (24) or perforations are formed as inlets or outlets (24 and col. 3, line 19-20) for coolant and communicate with the cooling channels (15a-b), optionally via a deflection chamber and/or transverse duct (16a-b).

As for claim 14, Katsuzawa and Rentschler teach the claimed invention as applied to claim 5 above. Katsuzawa further teaches (in Figs. 1-4) characterised in that at least on a first housing jacket end face (14) fixing elements (bolts, col. 3, line 21-22), are provided in order to mount a cover or an end shield (12, 14).

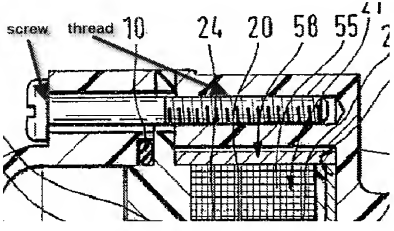
4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuzawa et al (US 5084642) in view of Rentschler et al (US 6599351) and in further view of Collong et al (US 6008314).

Katsuzawa and Rentschler teach the claimed invention as applied to claim 1 above. The references, however, failed to teach characterised by the use of a dipping varnish with a basis of epoxyaminourethane, deposited by a cathophoretic process. In the same field of endeavor, Collong teaches aminourethane harder epoxide based coating media. Regards by a cathophoretic process, as being product by process limitation, the patentable weight is negligible, and besides, the cathophoretic (electrophoresis varnish for cathodlic) process is included in the teaching of Rentschler. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Collong with those of Katsuzawa and Rentschler for multi-layer coating.

5. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuzawa et al (US 5084642) in view of Rentschler et al (US 6599351) and in further view of Lentz et al (US 6663362).

As for claim 11, Katsuzawa and Rentschler teach the claimed invention as applied to claim 10 above. The references, however, failed to teach characterised in that the bores or perforations have a female thread for the fixing of casting core holding elements and/or for receiving screw-type seals. In the same field of endeavor, Lentz

teaches (in Fig. 1) characterised in that the bores or perforations have a female thread (see sketch below) for the fixing of casting core holding elements and/or for receiving screw-type seals. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Lentz with those of Katsuzawa and Rentschler for reduction of parts.



As for claim 12, Katsuzawa, Rentschler and Lentz teach the claimed invention as applied to claim 11 above. Lentz further teaches (in Fig. 1) characterised in that the screw-type seals (see sketch above) are provided with sealing rings (10).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN K. KIM whose telephone number is (571)270-5072. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JK

/Darren Schuberg/
Supervisory Patent Examiner, Art Unit 2834